

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016754**Date Inspected:** 14-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Huang min**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 6

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06665.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Cross beam weld Components. Total number of welds UT Tested: 05 No's. The weld designations are review as follows:

1. CB3002E-018-001,002
2. CB3002C-018-001,005
3. CB3002B-018-001

This QA Inspector Randomly observed the following work in progress:

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Shielded Metal Arc Welding (SMAW) of weld joint WJF-0-039. Welder is identified as 09769. ZPMC Quality Control (QC) is identified as Mr. Huang min. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3311-TC-P4.

SMAW of weld joint WJF-0-41. Welder is identified as 215083. ZPMC Quality Control (QC) is identified as Mr. Huang min. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3311-TC-P4.

SMAW of weld joint WJF-0-082. Welder is identified as 057795. ZPMC Quality Control (QC) is identified as Mr. Huang min. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3311-TC-P4.

During Random in process visual inspection of Cross beam CB18 Side plates East and West, this QA Inspector observed that the excessive root openings between parts measured to be approximately 7 and 10 mm.

The effected weld joints are identified as CB3002J-002-083,084 and CB3002J-002-281,282 respectively. These root openings exceed the maximum tolerance specified in AWS D1.5 2002 section 3, paragraph 3.3.1. The approved drawing specifies fillet welds of these joints. This QA informed to ZPMC QC Certified Welding Inspector (CWI) identified as Mr.Huang min and American Bridge/Fluor (AB/F) QA Inspector Mr. Liu Hua Jie. Mr.Liu Fa Wen and Mr. Liu Hua Jie informed this QA that the root openings would be corrected in a manner compliant with the contract documents. Refer the attached photos for further information.

BAY- 7

Flux Cored Arc Welding (FCAW) of weld joint SA3078-008-002. Welder is identified as 204342. ZPMC Quality Control (QC) is identified as Mr. Xu Hai Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2333-C-P2-F.

FCAW of weld joint SA3078-007-002. Welder is identified as 053609. ZPMC Quality Control (QC) is identified as Mr. Xu Hai Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2333-C-P2-F.

FCAW of weld joint W2-SB1-012-020~025. Welder is identified as 051246. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint W2-SB1A-002-020~025. Welder is identified as 215689. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

SMAW Tack welding of weld joint FB3242-001-001,002. Welder is identified as 203204. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112-FCM.

BAY- 8

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

FCAW of weld joint BK004A5-055-062,063. Welder is identified as 067947. ZPMC Quality Control (QC) is identified as Mr. Liu Fa Wen. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2132.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer